

## REMARKS

In the Official Action mailed on **3 January 2006**, the Examiner reviewed claims 1-28. Claims 2 and 16 were rejected under 35 U.S.C. §101 as claiming the same invention as that of claims 1 and 9 of prior U.S. Patent No. 6,925,411.

Claims 1, 3-7, 9-15, 17-21, and 23-28 were rejected under 35 U.S.C. §102(b) as being anticipated by Knight et al (USPN 5,629,838, hereinafter “Knight”).

Claims 8 and 22 were rejected under 35 U.S.C. §103(a) as being unpatentable over Knight in view of Nabors (*Fast Capacitance Extraction of General Three-Dimensional Structures*, IEEE (1992), hereinafter “Nabors”).

### Rejections under 35 U.S.C. §101

Claims 2 and 16 were rejected as claiming the same invention as that of claims 1 and 9 of prior U.S. Patent No. 6,925,411.

Applicant respectfully disagrees that claims 2 and 16 in conjunction with parent claims 1 and 15 claim the same invention as that of claims 1 and 9 of prior U.S. Patent No. 6,925,411. Specifically, U.S. Patent No. 6,925,411 is directed to a **one-dimensional vernier device** which can provide misalignment data in only one linear direction and, given two of these devices widely separated, in rotation.

In contrast, the present invention provides a **two-dimensional vernier device**, which can provide misalignment data in six degrees of alignment (see FIG. 2 and paragraph [0040] of the instant application). This is an improvement over the prior art of U.S. Patent No. 6,925,411. 35 U.S.C. §101 states: “Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, **or any new and useful improvement thereof**, may obtain a patent therefor, subject to the conditions and requirements of this title.” The present invention is therefore patentable subject matter.

**Rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a)**

Independent claims 1 and 15 were rejected as being anticipated by Knight. Applicant respectfully points out that the measurement techniques in Knight **do not include a vernier array** for accurate positioning of the circuit elements (see Knight, col. 36, line 25 to col. 37, line 8).

In contrast, the present invention **includes a two-dimensional vernier array** for accurately positioning the integrated circuit elements (see FIG. 5, and paragraph [0045] of the instant application). This is beneficial because it allows accurate positioning of the integrated circuit elements in six degrees of alignment. The techniques described in Knight can provide only a rough alignment and not the accurate positioning provided by the present invention.

Accordingly, Applicant has amended independent claims 1 and 15 to include the limitations of dependent claims 2 and 16, respectively, to clarify that the present invention includes a two-dimensional vernier array for accurately positioning the integrated circuit elements. These amendments find support in FIG. 5, and in paragraph [0045] of the instant application. Dependent claims 2 and 16 have been canceled without prejudice.

Hence, Applicant respectfully submits that independent claims 1 and 15 as presently amended are in condition for allowance. Applicant also submits that claims 3-14, which depend upon claim 1, and claims 17-28, which depend upon claim 15, are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

## CONCLUSION

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

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